

## Comments on FCC NPRM - WT Docket No. 05-235

In paragraph 3, the Commission states that dropping all telegraphy exams will:

1. encourage individuals to become amateur radio operators,
2. eliminate an unnecessary requirement that may be discouraging amateur radio licensees from advancing their operating and technical skills, and
3. promote more efficient use of the spectrum currently allocated to the amateur radio service.

I disagree with all three of these Commission "beliefs" for the following reasons.

1. The current Technician license already provides a path of entry for individuals to become amateur radio operators without taking a code exam. The Technician license should convey some limited HF operating privileges, including both telegraphy and telephony, to provide the entry-level licensee with a wider exposure to the amateur radio service, however.

Whether the Commission decides to eliminate all code exams or not, the overall number of licensees will very likely remain approximately the same or may even decrease over the next 5 to 10 years. Many people who in earlier times might have pursued amateur radio are instead being attracted to the increasing variety and power of commercial communication technologies such as the Internet. Simply eliminating the code exams will have little or no effect on the total number of licensees. Of course, eliminating all code tests will increase the number of Extra and General class amateurs, particularly in the short run, because many of the currently licensed Technician class amateurs will upgrade. But as an incentive to attract new individuals to amateur radio, the elimination of all telegraphy exams will fail.

2. Requiring that a 5 word-per-minute (wpm) Morse exam be passed in order to earn a higher-class license encourages, rather than discourages, one to advance his operating skills! Passing a Morse exam is a simple, yet powerful, way to demonstrate a specific operating skill. With today's published pool of questions and answers, which tends to promote memorizing rather than true learning, demonstrating one's operating and technical skills via the current written exams is more open to question than passing a Morse exam by traditional methods.

In paragraph 37, the Commission states that

"... there is no objective means to measure technical and operating skills. Also, the purpose of the written examinations, under our rules, is not to determine whether a person has achieved a particular level of skill, but

rather to determine whether an individual can properly operate an amateur radio station."

These statements are incredible. Perfect objectivity isn't possible, of course, but to argue that there is no objective means to measure the skills possessed by amateur radio operators is nonsense. As an electrical engineering professor, I've devoted many hours of my life measuring the technical skills of students; the methods used to measure the skills of engineering students certainly apply in a similar manner to applicants pursuing an amateur radio operator's license. If the Commission truly believes that the only purpose of the written examinations is to determine whether a person can properly operate an amateur radio station, then most (if not all) of the questions pertaining to radio theory can be removed and only one examination focused on the amateur rules and regulations should be taken by all future applicants for an amateur radio license.

Amateurs who have no knowledge or experience in telegraphy are in no position to argue that all Morse exams should be eliminated. This is akin to allowing students to choose which subjects should be included and omitted in a particular field of study. When I first became interested in amateur radio, I was sure that I would only learn the code well enough to pass the 13 wpm exam and that I would then spend all my time operating radiotelephony. However, after spending a small amount of time on the air communicating via Morse, I discovered that I enjoyed it very much. To this day it is my favorite mode. If the Morse exam had not been required, there's a very good chance that I would never have pursued the mode. My experience in this regard is shared by a significant number of other amateur radio operators.

Many amateurs in the future will never even attempt telegraphy if the Morse exam is eliminated from all license classes. If an individual decides not to operate telegraphy after demonstrating a minimum proficiency through examination, that is quite different than allowing the individual to avoid telegraphy altogether by eliminating the Morse exam for all license classes.

3. Eliminating all telegraphy exams will most definitely not promote more efficient use of the radio spectrum currently allocated to the amateur radio service. In the short term, at least, there will be a large influx of voice operators on HF if the 5 wpm exam is eliminated because many of the current Technician licensees will upgrade to General or Extra class. However, a typical radiotelephone station occupies 10 to 20 times the bandwidth occupied by a single radiotelegraph station. The increase in the number of active phone stations will be many times the increase (if any) in the number of active Morse stations. Encouraging more radiotelephone stations at the expense of radiotelegraph stations is a recipe for disaster if

the Commission's objective is to accommodate the greatest number of stations communicating simultaneously.

One might argue that the rate of information for a phone station is many times that of a typical Morse station. However, even at a modest speed using standard abbreviations and Q signals, 10 to 20 radiotelegraph stations occupying the same total bandwidth as one radiotelephone station will convey more information. For the Commission to conclude that eliminating the Morse exam for all license classes will promote more efficient use of the spectrum is simply not correct.

In conclusion, I urge the Commission to not move forward with its proposal to eliminate the telegraphy examination for all classes of amateur radio license.

Very truly yours,

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